

~~✓~~ On page 31, line 20, after "then", delete "global", and insert - - local - -.

In the Abstract:

~~✓~~ On page 43, line 8, after "are", delete "randomly", and insert "randomly".

~~N.E.~~ On page 43, line 12, after "a", delete "weight", and insert - - weighted - -.  
~~which one~~

In the claims:

~~✓~~ Please cancel claims 1 and 5-7.

~~✓~~ Please amend claims 2-4 and 8-10 as follows:

1    2.    (Amended) An apparatus for handling multiple priorities for a multicast  
2    packet being output from a network element on at least two output ports  
3    comprising:

4        at least a first output queue and a second output queue, the first output  
5        queue having a priority higher than the second output queue, at  
6        each output port;

7        ~~a memory configured to output forwarding information about the multicast~~  
8        ~~packet in response to a memory access based in part on a~~  
9        ~~multicast address of the multicast packet, the forwarding~~  
10      ~~information including priority information indicating to which output~~  
11      ~~queue at each output port the multicast packet will be directed[.]~~

12     a central processing unit (CPU) coupled to the memory; and  
13     a computer program mechanism coupled to the CPU and configured to  
14     ~~modify the priority information if a flow associated with the multicast~~  
15     ~~packet misbehaves.~~

1    3.    (Amended) The apparatus of claim 2, [further including]:

2 a central processing unit coupled to the memory;] wherein the [a]  
3 computer program mechanism [coupled to the central processing  
4 unit configured to modify] modifies the priority information based on  
5 an amount of packets being transmitted through one of the output  
6 ports.

1 4. (Amended) The apparatus of claim 2, [further including:

2 [a central processing unit coupled to the memory;] wherein the [a]  
3 computer program mechanism [coupled to the central processing  
4 unit configured to modify] modifies the priority information based on  
5 information communicated between the network element and an  
6 intended [recipient] recipient of the multicast packet.

1 8. (Amended) An apparatus in a network element that is adapted to  
2 transmit a packet to multiple recipients and includes services for  
3 reservation-based protocols[,] for handling multiple priorities, the  
4 apparatus comprising:

5 at least two output ports, one associated with each of the multiple  
6 recipients, each of the output ports having at least a first output  
7 queue and at least a second output queue, the first output queue  
8 having a priority higher than the second output queue, at each port;

9 a memory configured to output forwarding information about the packet in  
10 response to a memory access based in part on a header of the  
11 packet, the forwarding information including priority information  
12 indicating to which output queue at each output port the packet will  
13 be directed[.];

14 a central processing unit (CPU) coupled to the memory; and

15 a computer program mechanism coupled to the CPU and configured to  
16 modify the priority information if a flow associated with the multicast

17                   packet exceeds one or more negotiated values associated with the  
18                   reservation-based protocol.

1       9. (Amended) The apparatus of claim 8, [further including:  
2                   a central processing unit coupled to the memory;] wherein the [a]  
3                   computer program mechanism [coupled to the central processing  
4                   unit and configured to modify] modifies the priority information  
5                   based on the amount of packets being transmitted through one of  
6                   the output ports.

1       10. (Amended) The apparatus of claim 8, [further including:  
2                   a central processing unit coupled to the memory;] wherein the [a]  
3                   computer program mechanism [coupled to the central processing  
4                   unit and configured to modify] modifies the priority information  
5                   based on reservation-based protocol information communicated  
6                   between the network element and an intended recipient of the  
7                   multicast packet.

Please add claims 11-30 as follows:

- 1 11. (New) An apparatus of claim 4, wherein the priority information is based  
2 on reservation-based protocol information communicated between the  
3 network element and an intended recipient of the multicast packet.
- 1 12. (New) An apparatus of claim 8, wherein the header of the packet  
2 comprises encapsulation information.
- 1 13. (New) An apparatus of claim 8, wherein the header of the packet  
2 comprises layer 3 class information.
- 1 14. (New) An apparatus of claim 2, wherein the priority information associated  
2 with the multicast packet is predetermined information for the flow  
3 associated with the multicast packet.
- 1 15. (New) An apparatus of claim 2, wherein the priority information associated  
2 with the multicast packet is obtained from the multicast packet.
- 1 16. (New) An apparatus of claim 8, wherein the priority information associated  
2 with the multicast packet is predetermined information for the flow  
3 associated with the multicast packet.
- 1 17. (New) An apparatus of claim 8, wherein the priority information associated  
2 with the multicast packet is obtained from the multicast packet.
- 1 18. (New) An apparatus for handling multiple priorities for a multicast packet  
2 being output from a network element on at least two output ports, each of  
3 the output ports comprising:  
4       a plurality of output queues at each output port, each output queue having  
5       a unique priority;  
6       a memory configured to output priority information associated with the  
7       multicast packet indicating to which output queue at each output  
8       port the multicast packet will be directed;

- 9           a central processing unit coupled to the memory; and
- 10          a computer program mechanism coupled to the central processing unit  
11            and configured to override the priority information if the flow  
12            associated with the multicast packet sends multicast packets in  
13            excess of one or more negotiated parameters.
- 1       19. (New) An apparatus of claim 18, wherein the priority information  
2            associated with the multicast packet is predetermined information for the  
3            flow associated with the multicast packet.
- 1       20. (New) An apparatus of claim 18, wherein the priority information  
2            associated with the multicast packet is obtained from the multicast packet.
- 1       21. (New) An apparatus of claim 18, wherein the computer program  
2            mechanism overrides the priority information by directing the multicast  
3            packet to the lowest priority queue associated with the output port of the  
4            misbehaving flow.
- 1       22. (New) A method for handling multiple priorities for a multicast packet  
2            being output from a network element on at least two output ports,  
3            comprising:  
4              directing the multicast packet to one of a plurality of output queues  
5              associated with an output port as determined by priority information  
6              associated with the multicast packet, the output queues each  
7              having unique priority levels;  
8              overriding the priority information associated with the multicast packet if a  
9              flow associated with the multicast packet is detected to be  
10             misbehaving.
- 1       23. (New) A method of claim 22, wherein the priority information associated  
2            with the multicast packet is predetermined information for the flow  
3            associated with the multicast packet.

- 1 24. (New) A method of claim 22, wherein the priority information associated  
2 with the multicast packet is obtained from the multicast packet.
- 1 25. (New) A method of claim 22, wherein the priority information is overridden  
2 by lowering the priority information of the multicast packet, the lowering  
3 comprising directing the multicast packet to the lowest priority queue  
4 associated with the output port of the misbehaving flow.
- 1 26. (New) A method of claim 22, wherein the flow misbehaves if it sends  
2 packets in excess of one or more negotiated parameters.
- all*  
1 27. (New) An apparatus as in claim 2, wherein the computer program  
2 mechanism modifies the priority information by lowering the priority  
3 information of the multicast packet, the lowering comprising lowering the  
4 priority of the flow associated with the multicast packet if the flow  
5 misbehaves.
- 1 28. (New) An apparatus as in claim 8, wherein the computer program  
2 mechanism modifies the priority information by lowering the priority  
3 information of the multicast packet, the lowering comprising lowering the  
4 priority of the flow associated with the multicast packet if the flow exceeds  
5 one or more negotiated values of the reservation-based protocol.
- 1 29. (New) An apparatus as in claim 18, wherein the computer program  
2 mechanism overrides the priority information by lowering the priority  
3 information of the multicast packet, the lowering comprising lowering the  
4 priority of the flow associated with the multicast packet if the flow sends  
5 multicast packet in excess of one or more negotiated parameters.
- 1 30. (New) A method as in claim 22, wherein the overriding the priority  
2 information associated with the multicast packet comprises lowering the  
3 priority information of the multicast packet, the lowering comprising  
4 lowering the priority of the flow associated with the multicast packet if the  
5 flow misbehaves.